

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.  
14-R-0168

CUSTOMER NO.  
26617

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA.  
include Zip Code)

BIOMODELS AND AFFILIATES  
277 LINDEN ST SUITE 201  
WELLESLEY, MA 02482  
(781) 235-3808

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS(sites)

(b)(2)High, (b)(7)f

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS FORM 7023A)

| A.<br>Animals Covered<br>By The Animal<br>Welfare Regulations | B. Number of<br>animals being<br>bred,<br>conditioned, or<br>held for use in<br>teaching, testing,<br>experiments,<br>research, or<br>surgery but not<br>yet used for such<br>purposes. | C. Number of<br>animals upon<br>which teaching,<br>research,<br>experiments, or<br>tests were<br>conducted<br>involving no<br>pain, distress, or<br>use of pain-<br>relieving drugs. | D. Number of animals upon<br>which experiments,<br>teaching, research,<br>surgery, or tests were<br>conducted involving<br>accompanying pain or<br>distress to the animals<br>and for which appropriate<br>anesthetic, analgesic, or<br>tranquilizing drugs were<br>used. | E. Number of animals upon which teaching,<br>experiments, research, surgery or tests were<br>conducted involving accompanying pain or distress<br>to the animals and for which the use of appropriate<br>anesthetic, analgesic, or tranquilizing drugs would<br>have adversely affected the procedures, results, or<br>interpretation of the teaching, research,<br>experiments, surgery, or tests. (An explanation of<br>the procedures producing pain or distress in these<br>animals and the reasons such drugs were not used<br>must be attached to this report) | F.<br>TOTAL NO.<br>OF ANIMALS<br><br>(Cols. C +<br>D + E) |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| 4. Dogs                                                       |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
| 5. Cats                                                       |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
| 6. Guinea Pigs                                                |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
| 7. Hamsters                                                   |                                                                                                                                                                                         |                                                                                                                                                                                      | 852                                                                                                                                                                                                                                                                       | 58                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 910                                                       |
| 8. Rabbits                                                    |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
| 9. Non-Human Primates                                         |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
| 10. Sheep                                                     |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
| 11. Pigs                                                      |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
| 12. Other Farm Animals                                        |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
| 13. Other Animals                                             |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
|                                                               |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
|                                                               |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |
|                                                               |                                                                                                                                                                                         |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                           |

ASSURANCE STATEMENTS

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

**CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL**  
(Chief Executive Officer or Legally Responsible Institutional official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED

(b)(6), (b)(7)c

12/21/05

PART 1 - HEADQUARTERS

Ra2

## Column E Explanation

DEC 27 2005

This form is intended as an aid to completing the Column E explanation. It is not an official form and its use is voluntary. Names, addresses, protocols, veterinary care programs, and the like, are not required as part of an explanation. A Column E explanation must be written so as to be understood by lay persons as well as scientists.

1. Registration Number: 14-R-168

2. Number 58 (out of 910 total) of animals used in this study.

3. Species (common name) Hamster of animals used in the study.

4. Explain the procedure producing pain and/or distress. In the hamster cheek pouch model of mucocysts (mouth ulcers) one cheek pouch is used to develop ulcers for treatment. The control animals do not receive treatments and the ulcers may reach a size of  $\frac{1}{2}$  to  $\frac{3}{4}$  of the size of the pouch. These animals are scored as a 4 or 5. The animals eat & maintain weight because the other cheek pouch is unaffected. Ulcers of this size may be painful.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see Item 6 below)

The USDA inspector has highlighted a concern that hamsters reaching a score of 4 or 5 are painful. At this time we have no data to support that assumption or the assumption that they are not painful. So for retrospective reporting we will categorize all 4's & 5's as painful. In 2006 a study will be undertaken to verify the painfulness of 4's or 5's. At that time any found to be painful will routinely receive analgesics.

6. What, if any, federal regulations require this procedure? Cite the agency, the code of Federal Regulations (CFR) title number and the specific section number (e.g., APHIS, 9 CFR 113.102):

Agency None CFR N/A